## HISTORIC AMERICAN ENGINEERING RECORD

HAER ALA 37-BIRM, 45-

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Stockham Pipe & Fittings Company (Stockham Valve & Fittings Co.) Birmingham Industrial District 4000 10th Avenue North Birmingham Jefferson County Alabama HAER No. AL-49

NOTE: Photographs AL-49-1 through AL-49-10 were taken by Jet Lowe, Fal'l 1993 and Spring 1994. AL-49-11 thru AL-49-26 are copies of historic views from the Stockham Archives acquired by Bode Morin Spring 1994.

AL-49-1	NORTHEAST VIEW OF FOUNDRY FROM TOP OF GREY IRON CUPOLA SHOWING CORE ROOM ROOF DIRECTLY NORTHEAST, GREY IRON FOUNDRY TO THE RIGHT, MALLEABLE IRON CUPOLAS AND FOUNDRY NORTHEAST OF GREY IRON FOUNDRY WITH THE BRASS FOUNDRY IN THE REAR.
AL-49-2	SOUTHWEST VIEW OF FOUNDRY FROM TOP OF GREY IRON CUPOLA SHOWING OPENED TOP OF CUPOLA WITH EMISSION RECOVERY DUCT COMING OFF. TO THE RIGHT IS THE STORAGE AND SHIPPING BUILDING.
AL-49-3	STOCK YARD LOOKING SOUTHEAST SHOWING OVERHEAD YARD CRANE RAIL, THE MALLEABLE CUPOLAS AND EMISSION RECOVERY SYSTEM, OLD SHED ROOF THAT COVERED THE EARLIER MALLEABLE CUPOLA CHARGING CRANE, MALLEABLE FOUNDRY, AND POLLUTION CONTROL BAGHOUSE.
AL-49-4	FOUNDRY BUILDING SCAPE SOUTH-SOUTHWEST FROM MALLEABLE STOCK YARD CRANE SHOWING VALVE ASSEMBLY BUILDINGS AND DISTANT ROOF OF THE SHIPPING AND STORAGE BUILDING.
AL-49-5	FOUNDRY LANDSCAPE LOOKING SOUTHWEST FROM MALLEABLE STOCK YARD CRANE SHOWING CRANE RAILS, GREY IRON CUPOLA AND EMISSION RECOVERY SYSTEM.
AL-49-6	FOUNDRY LANDSCAPE LOOKING WEST-SOUTHWEST FROM MALLEABLE STOCK YARD CRANE SHOWING SHED ROOF OF OLD MALLEABLE CUPOLA CHARGER.

AL-49-7 FOUNDRY LANDSCAPE LOOKING WEST-NORTHWEST FROM
MALLEABLE STOCK YARD CRANE, SHOWING CRANE MOTOR
AND MALLEABLE CUPOLAS WITH OPEN TOPS AND EMISSION
RECOVERY DUCTS.

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AL-49-8 FOUNDRY LANDSCAPE LOOKING NORTHWEST FROM MALLEABLE STOCK YARD CRANE SHOWING THE MALLEABLE ANNEALING BUILDING AND THE BRASS FOUNDRY. UNUSED 1950S GUARD SHACK WITH SEGREGATED ENTRANCES AL-49-9 SITTING IN FRONT OF "Y" BUILDING THAT WAS CONSTRUCTED OUTSIDE OF THE THEN FENCED AREA. AL-49-10 COKE STORAGE HOPPER LOCATED OUTSIDE THE MALLEABLE FOUNDRY SHOWING LOADING DEVICE THAT USED A SKIP CAR TO FILL THE HOPPER FROM UNDERGROUND GRAVITY-FED STORAGE AREAS FROM INCOMING RAILROAD CARS. GAS-FIRED CRUCIBLE FURNACES WERE USED TO MELT AL-49-11 SMALL, BATCH QUANTITIES OF BRONZE IN STOCKHAM'S BRASS FOUNDRY FOR THE PRODUCTION OF BRONZE VALVES, CA. 1950. THE DIVISION OF STOCKHAM'S WORKFORCE FELL MOSTLY AL-49-12 ALONG RACIAL BOUNDARIES. THESE WHITE COLLAR WORKERS TYPIFIED THE MAKEUP OF ENGINEERING, ACCOUNTING, SALES, AND SUPERVISORY STAFFS OF THE FIRM CA.1950. THESE STOCKHAM WORKERS FROM THE MALLEABLE FOUNDRY AL-49-13 TYPIFIED THE RACIAL SEPARATIONS WITHIN THE COMPANY WHERE AFRICAN-AMERICANS FILLED THE VAST MAJORITY OF LABOR-INTENSIVE POSITIONS WITHOUT BEING REPRESENTED IN WHITE COLLAR JOBS CA. 1950. IN 1922, PRIOR TO THE INSTALLATION OF MOLDING AL-49-14 MACHINES AND CONVEYORS, MOLDERS, SUCH AS THESE FROM THE GREY IRON FOUNDRY, HAND PACKED MOLDS AND LAID THEM OUT IN ROWS ON THE FLOOR TO BE POURED BY HAND-HELD CRUCIBLES, SHAKEN OUT, AND CLEANED. AL-49-15 STOCKHAM PACKED SMALL FITTINGS IN BARRELS AND. AS EARLY AS 1919, TRANSPORTED THEM IN THEIR OWN PACKARD DELIVERY TRUCKS. THE INSTALLATION OF CONVEYORS AND OVERHEAD RAILS AL-49-16 ELIMINATED THE NEED TO LAY MOLDS OUT ON FLOORS AND HAND-POUR THEM. INSTEAD, WORKERS PULLED LARGE LADLES ALONG OVERHEAD RAILS AND FILLED CONVEYOR-DRIVEN MOLDS WHILE THEY STOOD ON A MOVING PLATFORM THAT TRAVELED AT THE SAME SPEED AS THE MOLD CONVEYOR, CA. 1950.

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- AL-49-17 CUPOLA TENDERS FILLED THE LARGE LADLES WORKERS
  USED TO POUR MOLDS ON THE CONVEYORS FROM BULL
  LADLES THAT WERE USED TO STORE BATCH QUANTITIES OF
  IRON TAPPED FROM THE CUPOLA, CA. 1950.

  AL-49-18 PRIOR TO THE USE OF CONVEYORS AND OVERHEAD RAILS,
- AL-49-18 PRIOR TO THE USE OF CONVEYORS AND OVERHEAD RAILS, MOLDERS, USUALLY AFRICAN-AMERICAN, HAD TO INDIVIDUALLY HAND FILL MOLDS LAID OUT ON THE FLOOR, SUCH AS THESE IN THE MALLEABLE FOUNDRY IN 1923.
- AL-49-19 WHILE AUTOMATION REDUCED SOME LABOR-INTENSIVE POSITIONS, THESE LARGE ROTATING CLEANING MACHINES WHICH TUMBLED CASTINGS OVER EACH OTHER TO BREAK OFF EXCESS MATERIAL WHILE QUICKLY COOLING THE METALS IN THE MALLEABLE FOUNDRY PRIOR TO ANNEALING, STILL REQUIRED HAND SEPARATION OF THE EXCESS MATERIAL, CA. 1950.
- AL-49-20 SIMILAR TO THE SYSTEM INSTALLED IN THE GREY IRON FOUNDRY, MALLEABLE WORKERS FILLED MOLDS TRAVELING ON A CONVEYOR FROM LADLES ATTACHED TO OVERHEAD RAILS WHILE THEY STOOD ON A PLATFORM MOVING AT THE SAME SPEED AS THE CONVEYOR, CA. 1950.
- AL-49-21 WHILE AUTOMATED CORE BLOWERS REDUCED THE NUMBER OF HAND-MADE CORES IN THE 1950S, MANY SMALLER CORES COULD STILL BE FORMED FASTER BY HAND WITH A RESIGN IMPREGNATED SAND PRIOR TO BAKING. HAND CORE-MAKING WAS ALSO ONE OF THE FEW POSITIONS WOMEN WERE ALLOWED TO FILL IN THE FOUNDRY.
- AL-49-22 A CORE WORKER DISPLAYS THE CORE BOX AND CORES FOR A BRASS BONNET MADE ON A CORE BLOWER, CA. 1950.
- AL-49-23 CORE WORKER OPERATING A CORE-BLOWER THAT
  PNEUMATICALLY FILLED CORE BOXES WITH RESIGN
  IMPREGNATED SAND AND CREATED A CORE THAT THEN
  REQUIRED BAKING, CA. 1950.
- AL-49-24 A CORE WORKER DISPLAYS THE CORE BOX AND CORES FOR A BRASS GATE VALVE BODY MADE ON A CORE BOX, CA. 1950.
- AL-49-25 CORES, WHICH FORM THE INTERIOR SURFACES OF MOLDS BY PROVIDING A SOLID STRUCTURE FOR MOLTEN IRON TO FLOW AROUND ARE CAREFULLY PLACED INTO THE CAVITIES OF MOLDS IN THE BRASS FOUNDRY, CA. 1950.

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SOME CORES, SUCH AS THESE IN THE BRASS FOUNDRY CA. 1950, ARE DIPPED INTO A SOLUTION PRIOR TO BEING BAKED IN THE CORE OVENS BEHIND, TO SET THE RESIN AND CREATE A STRUCTURE STRONG ENOUGH TO HOLD UP AGAINST MOLTEN METAL.

ADDENDUM TO STOCKHAM PIPE & FITTINGS CO. (Stockham Valve & Fittings Co.) HAER No. AL-49 (Page 5)

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- AL-49-27 AERIAL VIEW OF STOCKHAM VALVES & FITTINGS ALONG VANDERBILT ROAD, BIRMINGHAM CITY CENTER SKYSCRAPERS ALIGNED ALONG 20TH STREET IN THE BACKGROUND
- AL-49-28 AERIAL VIEW OF STOCKHAM PIPE AND FITTINGS LOOKING SOUTHWEST TOWARD THE BIRMINGHAM CITY CENTER, RED MOUNTAIN AND SLOSS FURNACE NATIONAL HISTORIC LANDMARK.
- AL-49-29 AERIAL VIEW OF STOCKHAM PIPES & FITTINGS.
- AL-49-30 AERIAL VIEW OF STOCKHAM PIPES & FITTINGS